MISSISSIPPI DEPARTMENT OF AGRICULTURE AND COMMERCE
121 North Jefferson Street
Jackson, MS 39201
601-359-1100

BUREAU OF PLANT INDUSTRY
705 Stone Blvd
Mississippi State, MS 39762
662-325-3390

MISSISSIPPI FARMERS MARKET
929 High Street
Jackson, MS 39202
601-354-6573

MISSISSIPPI AGRICULTURE & FORESTRY MUSEUM
1150 Lakeland Drive
Jackson, MS 39216
601-432-4500

REGULATORY SERVICES
601-359-1111

FAX
601-354-6290

EMAIL
webmaster@mdac.ms.gov

WEBSITE
www.mdac.ms.gov

COVER PHOTO CREDIT:
Adobe Stock Photo

MISSISSIPPI AG FACTS

PRODUCTION VALUE
$7.6 BILLION FOR 2016

FARMS
36,700 IN MISSISSIPPI

ACREAGE
10,800,000 FARM ACREAGE IN MISSISSIPPI

CATFISH
35,000 WATER ACRES IN MISSISSIPPI

FOREST
19,700,000 FOREST ACRES IN MISSISSIPPI

NATIONALLY
MISSISSIPPI RANKS IN THE TOP 20 IN PRODUCTION OF 15 COMMODITIES

WORKFORCE
29% OF THE STATE’S WORKFORCE IS EMPLOYED IN JOBS RELATED DIRECTLY OR INDIRECTLY TO AGRICULTURE
### MISSISSIPPI TOP 10

**Mississippi’s top commodities, based on cash receipts**

<table>
<thead>
<tr>
<th>Rank</th>
<th>Commodity</th>
<th>Value in 2016</th>
<th>U.S. Rank</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Broilers</td>
<td>$2.93 billion</td>
<td>#5</td>
<td>The value of poultry produced in Mississippi in 2016 was $2.93 billion. Mississippi ranks #5 in the U.S. in broiler production.</td>
</tr>
<tr>
<td>6.</td>
<td>Cattle</td>
<td>$315 million</td>
<td>#18</td>
<td>The value of production of cattle in 2016 was $315 million. Mississippi had 940,000 head of cattle on 15,940 farms.</td>
</tr>
<tr>
<td>2.</td>
<td>Forest</td>
<td>$1.41 billion</td>
<td>#3</td>
<td>The value of forestry produced in Mississippi in 2016 was $1.41 billion. Mississippi ranks #3 in the U.S. in pulpwood production.</td>
</tr>
<tr>
<td>7.</td>
<td>Catfish</td>
<td>$169 million</td>
<td>#1</td>
<td>The value of catfish produced in Mississippi in 2016 was $169 million. Mississippi ranks #1 in the U.S. in farm-raised catfish production.</td>
</tr>
<tr>
<td>3.</td>
<td>Soybeans</td>
<td>$1.01 billion</td>
<td>#14</td>
<td>The value of soybeans produced in Mississippi in 2016 was $1.01 billion. Mississippi ranks #14 in the U.S. in soybean production.</td>
</tr>
<tr>
<td>8.</td>
<td>Rice</td>
<td>$139 million</td>
<td>#6</td>
<td>The value of rice production in Mississippi in 2016 was $139 million. Mississippi ranks #6 in the U.S. in rice production.</td>
</tr>
<tr>
<td>4.</td>
<td>Cotton</td>
<td>$442 million</td>
<td>#3</td>
<td>The value of cotton production in 2016 was $442 million. Mississippi ranks #3 in the United States in cotton and cottonseed production.</td>
</tr>
<tr>
<td>9.</td>
<td>Hay</td>
<td>$127 million</td>
<td>#13</td>
<td>The value of hay produced in Mississippi in 2016 was $127 million. Mississippi harvested 640,000 acres producing 1.41 million tons of hay.</td>
</tr>
<tr>
<td>5.</td>
<td>Corn</td>
<td>$436 million</td>
<td>#18</td>
<td>The value of production of corn in 2016 was $436 million. Mississippi ranks #18 in the U.S. in corn for grain production.</td>
</tr>
<tr>
<td>10.</td>
<td>Sweet Potatoes</td>
<td>$116 million</td>
<td>#3</td>
<td>The value of production of sweet potatoes in 2016 was $116 million. Mississippi ranks #3 in the U.S. in sweet potato production.</td>
</tr>
</tbody>
</table>
# Table of Contents

01  Message from The Commissioner
02  Executive Summary
04  Agency Overview
05  Revenues and Expenditures
06  Regulatory Services
07  Consumer Protection
10  Federal and State Inspection Program
11  Petroleum Products Inspection
13  Meat Inspection
14  Weights and Measures
16  Metrology Lab
17  Bureau of Plant Industry
24  Market Development
29  Mississippi Farmers Market
30  Information Management
31  Agriculture and Livestock Theft Bureau
33  Mississippi Agriculture and Forestry Museum
MESSAGE FROM THE COMMISSIONER  
CINDY HYDE-SMITH

As the largest industry in Mississippi, agriculture serves as an integral part of our state’s economy. Each year, Mississippi’s 36,700 farms produce approximately $7.6 billion worth of agricultural products, employing 29 percent of our workforce.

The Mississippi Department of Agriculture and Commerce (MDAC) strives to promote the Mississippi agriculture industry, while enforcing laws governing the various agricultural sectors and providing services to consumers and agribusinesses. Every Mississippian, not just those involved in the production, processing, and retailing of agricultural products, is touched by the work MDAC does each day. Consumers can be assured they are getting what they pay for as MDAC works to establish fairness and equity in the marketplace, no matter if it is purchasing safe foods for their families or putting gas in their cars.

The Annual Report provides a thorough overview of MDAC’s programs and services and highlights our accomplishments during fiscal year 2017. Our dedicated staff strives to serve the consumers of Mississippi in an efficient and effective manner while utilizing taxpayer funds wisely. The collaborations and joint efforts with other state and federal agencies along with the Mississippi Legislature are also integral to MDAC’s success.

I encourage you to learn more about the Mississippi Department of Agriculture and Commerce through our website, www.mdac.ms.gov.

Sincerely,
\[Signature\]

Cindy Hyde-Smith, Commissioner
The responsibilities of the Mississippi Department of Agriculture and Commerce (MDAC) are multifaceted. The mission of MDAC is to regulate and promote agricultural-related businesses within the state and to promote Mississippi’s products throughout the state and the rest of the world for the benefit of all Mississippi citizens.

**BUREAU OF REGULATORY SERVICES**

The Bureau of Regulatory Services is responsible for the various regulatory functions of the Department, which extend from on-farm production to processing and retail markets. Regulatory Service Inspectors conduct sanitation inspections of grocery stores and meat plants to ensure the adherence to food safety regulations. They are also responsible for the certification of gas pumps and verification of weights and measures.

- Weights & Measures Division tested 7,728 devices/scales.
- Consumer Protection Division issued 2,505 retail food establishment licenses and conducted 3,881 retail food sanitation inspections.
- Meat Inspection Division inspected 94,839,400 pounds of red meat and poultry products.
- Petroleum Products Inspection Division inspected 64,889 individual devices and obtained 2,119 fuel samples.

**BUREAU OF PLANT INDUSTRY**

The Bureau of Plant Industry (BPI) protects the agricultural and horticultural interests of Mississippi from harmful insects, diseases, and weeds. The Bureau is also responsible for registering pesticides, feeds, seeds, fertilizers, and soil amendments sold in the state, as well as, permitting all pest control operators throughout the state.

- BPI administers approximately 31 programs, which includes Pesticide and Environmental Programs; Structural Pest Control Programs; Incidents and Complaints; Feed, Seed, Fertilizer, Lime, Soil, and Plant Amendment Regulatory; and Testing, Horticulture, Apiary, and Plant Pest Quarantine.
- BPI registered 18,946 pesticide and fertilizer products; registered 1,383 feed, fertilizer, and lime manufacturers, and distributors; collected 17,813 pesticide, seed, feed, fertilizer, and lime samples; issued 4,743 nursery, nursery dealers, dealers, professional, consultants, and seed licenses; and performed 1,099 certification exams.
- BPI also certified 13,928 bee colonies and monitored 3,165 detection survey traps throughout the state.
- Approximately 30,000 seed tests were analyzed.
- BPI investigated 133 pesticide drift cases.

**MISSISSIPPI AGRICULTURAL & LIVESTOCK THEFT BUREAU**

The Mississippi Agricultural and Livestock Theft Bureau enforces laws to prevent agricultural related thefts. The Bureau investigates any theft that involves agribusiness, including timber theft, equipment theft, chemical theft, and livestock theft. The Bureau also handles the registration of all livestock brands in the state.
EXECUTIVE SUMMARY CONTINUED

• The Bureau investigated 141 cases with a reported value of $256,079.
• Property valued at $71,821 was recovered.

MARKET DEVELOPMENT DIVISION

The Market Development Division is responsible for promoting Mississippi's agricultural products and agricultural-related businesses statewide and worldwide through programs such as the Certified Farmers Market Program, Agritourism Registration Program, Farm-to-School Program, and the *Mississippi Market Bulletin*. The Mississippi Farmers Market provides farmers, specialty food processors, and artisans with a convenient, affordable location to sell their locally grown and produced items directly to the consumer.

• The Division received $337,126.18 in Specialty Crop Block Grant funds from USDA to promote the specialty crop industry in the state. Since its inception in 2006, MDAC has received $2,995,171.85 from USDA in Specialty Crop Block Grant funds.
• Through the Farm-to-School Program, administered in conjunction with the Mississippi Department of Education, schools ordered 16,528 cases of Mississippi product totaling $652,643.55.
• The Mississippi Farmers Market provided a venue for 80 total vendors, an average of 47 a week, to sell Mississippi grown crops, specialty foods, and works from local artisans. On average, 1,700 shoppers visit the Market each week.

MISSISSIPPI AGRICULTURE & FORESTRY MUSEUM

The Mississippi Agriculture and Forestry Museum, the educational arm of the Department, creates an environment that communicates the value of past and present Mississippi agricultural lifestyles, relationships, and practices and their relevance. The Museum tells the story of Mississippi’s agricultural history through indoor and outdoor exhibits and events.

• The Mississippi Agriculture and Forestry Museum was visited by more than 91,000 people in fiscal year 2017.
The mission of the Mississippi Department of Agriculture and Commerce is to regulate and promote agricultural-related businesses in the state and promote Mississippi’s products throughout the state and the rest of the world for the benefit of all Mississippi citizens.
GENERAL FUNDS ONLY

**Personnel**: 99%

**Contractual**: 0.75%

**Commodities**: 0.25%

Total Revenues: $7,307,084
Total Expenditures: $7,307,084

SPECIAL FUNDS ONLY

**Personnel**: 43%

**Subsidies, Loans & Grants**: 12%

**Commodities**: 10%

**Contractual Services**: 25%

Total Revenues: $5,557,828
Total Expenditures: $4,584,192

GENERAL & SPECIAL FUNDS

**Personnel**: 77%

**Subsidies, Loans & Grants**: 5%

**Commodities**: 4%

**Contractual Services**: 10%

Total Revenues: $12,864,912
Total Expenditures: $11,891,276
The Bureau of Regulatory Services is a regulatory bureau within the Mississippi Department of Agriculture and Commerce. Its mission is to effectively and efficiently administer and enforce the laws and regulations charged to the Bureau. The foremost goals of the Bureau are to protect the health and economic welfare of all citizens, to afford a measure of economic protection which citizens cannot provide for themselves, and to strive for equity in the marketplace which, when realized, works to the good of all citizens of this state.

The Bureau is divided into area-specific divisions that regulate certain businesses within the state. The Bureau administers state laws and promulgates regulations to support those laws in the areas of Meat Inspection, Retail Food Sanitation, Labeling laws, Grains, Aquaculture, Peanuts, Petroleum, and Weights and Measures. The Bureau partners with multiple federal and state agencies to carry out its mission.

Julie McLemore, Director
Julie@mdac.ms.gov
The Consumer Protection Division protects the interests of the general public by ensuring food quality and safety and fairness in addition to equity in the retail marketplace.

The Consumer Protection Division, one of the most diversified divisions within the Department, enforces retail food safety and sanitation laws and regulations, weights and measures standards, and food labeling requirements in retail food establishments, including grocery stores. The Consumer Protection Division conducts routine inspections of retail food establishments in Mississippi to ensure that food safety and sanitation regulations are being met. Sanitary meat markets, food at appropriate temperatures, soap in restrooms, and the absence of insects and rodents are just a few of the things inspectors routinely examine.

The Consumer Protection Division benefits consumers by striving to ensure that they get what they pay for, such as paying no more than the advertised prices of goods. In addition, inspectors check the accuracy of scales in all retail food establishments to verify that weights and measures standards are being met, ensuring that consumers are getting the quantity that they pay for.

Weights and measures inspections include the following:
- Ensuring the accuracy of scales, including meat scales, deli scales, produce scales, and checkout scales;
- UPC price verification sample testing, which ensures that prices on shelves match prices at checkout registers; and
- Net weight package checking inspections, which ensure not only that consumers are paying for only the net weight of foods, but also that prices properly reflect the correct weight.

Enforcing proper food labeling requirements is also a responsibility of the Division. Through a cooperative agreement with the United States Department of Agriculture (USDA) Food Safety and Inspection Service, the Division conducts meat compliance inspections in retail food establishments. These inspections make sure that illegally processed meats are not in the marketplace.
In addition, the Division conducts Country-of-Origin Labeling (COOL) inspections through a cooperative agreement with the USDA Agricultural Marketing Service. The benefit of these inspections is that consumers are aware of where their foods come from. Foods such as muscle cuts of meats, fresh fruits and vegetables, and unprocessed nuts must have country-of-origin declarations at the final point of sale. The enforcement of COOL laws increases consumer knowledge and allows consumers to have a greater range of choices.

To ensure that consumers are in fact buying pure honey and pure syrup when labels state such claims, the Division works in concert with the Mississippi State Department of Health and the Mississippi State Chemical Lab to regulate the sale of honey and syrup.

The Division also makes inspections in restaurants across the state, making sure that catfish, shrimp, and crawfish being promoted as U.S. products are not being replaced with foreign substitutes. To avoid food fraud, laws prohibit retailers from selling similar foods disguised as U.S. products.

The Mississippi Certified Farmers Market (CFM) Program, which is administered by the MDAC Market Development Division, is carried out in conjunction with the Consumer Protection Division. Consumer Protection Inspectors inspect all farmers markets applying for CFM eligibility to ensure certain requirements are met by vendors and their foods.

The Division has a natural disaster partnership with the FDA to work with that agency and other state agencies in the event of natural disasters, such as hurricanes and tornadoes. In order to help respond to emergencies, the Division has mapped the GPS coordinates of all of its stores.
ACCOMPLISHMENTS

• Issued 2,505 retail food establishment license.
• Conducted 3,881 retail food sanitation inspections.
• Checked 42,827 items for net weight.
• Inspected 70,610 dozen of shell eggs.
• Conducted 3,336 labeling inspections; 3,706 meat compliance inspections; 3,884 disposition of garbage inspections; and 1,353 UPC price verification inspections.
• Conducted 424 Catfish/Shrimp/Crawfish Marketing inspections.
• Conducted 64 USDA COOL audits.
• Certified 29 Mississippi Farmers Markets.

DIRECTOR
ADAM CHOATE
Adam@mdac.ms.gov

Inspectors conducted 64 USDA Country-of-Origin Labeling (COOL) audits to ensure customers were provided with correct information regarding the source of certain foods.
FOOD SAFETY

The Federal/State Inspection Program Division provides quality inspections for produce growers as well as unbiased food safety audits.

This Division conducts fruit and vegetable inspections, as well as third party food safety audits known as Good Agricultural Practices/Good Handling Practices (GAP/GHP) audits. All inspections and food safety audits are provided statewide to farms, packers, and wholesalers.

The GAP/GHP audits are voluntary independent audits of produce suppliers throughout the production and supply chain. GAP/GHP audits focus on best agricultural practices to verify that fruits and vegetables are produced, packed, handled, and stored in the safest manner possible to minimize risks of microbial food safety hazards. The audits verify adherence to the recommendations made in the U.S. Food and Drug Administration’s Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables and industry recognized food safety practices.

Farmer Stock Peanuts must be inspected and a grade issued per lot in order for the farmer to receive payment at the point of sale. The Federal/State Inspection Program Division grades the peanuts brought to buying points in the state.

ACCOMPLISHMENTS

• Conducted 75 GAP/GHP food safety audits.
• Graded 66,301 tons of peanuts at four buying points in the state, employing 22 contract seasonal workers.

DIRECTOR
KEVIN RIGGIN
Kevin@mdac.ms.gov
ENSURING COMPLIANCE

The Petroleum Products Inspection Division regulates the motor fuel sold in Mississippi to ensure that those who purchase petroleum products and motor fuels get what they pay for in terms of quality and quantity.

All petroleum products sold in the state must be registered with MDAC’s Petroleum Products Inspection Division. All retail motor fuel products which include gasoline, ethanol blended fuel, diesel fuel, biodiesel blended fuel, and kerosene, are analyzed by the Mississippi State Chemical Lab to ensure product compliance within ASTM specifications. Analysis includes tests for octane number, alcohol content, diesel flash point, biodiesel content, and the presence of water in fuel.

The Division conducts annual inspections of the Retail Motor-Fuel Dispensers (RMFD), commonly known as gas pumps, in the state to ensure that they are in compliance with all laws and regulations. These inspections consist of ensuring the accuracy of RMFDs, testing for the presence of water, checking signage to ensure that the proper price is displayed on all signs, and checking the quality of the fuel to ensure proper product designations. Violations are issued as necessary. Petroleum equipment repairmen are required to register with the Division.

ACCOMPLISHMENTS

• Completed modernization of work truck testing units.
• Increased efficiency by eliminating printed inspection reports by 98 percent. Reports are sent electronically to respective responsible parties with a valid email address.
• Registered 213 fuel distributors and licensed 471 petroleum equipment repairmen.
• Conducted annual inspections of 54,742 registered devices at 2,783 retail establishments and obtained 2,119 fuel samples.
• Inspected a total of 64,889 individual devices.
• Responded to 223 consumer complaints within 24 hours, which resulted in corrective action being taken in over 20% of the complaints for non-compliance.
• Enforced stop sales for 134 fuel violations, 144 calibration violations, 318 sign violations, and 121 water violations.
Petroleum Testing Units used by each inspector have proven to be an effective and efficient method of conducting inspections, while maintaining the highest level of safety for field personnel. Each testing unit consists of a “slide-in” secured and mounted on a work truck. All units have the capacity to test 48 devices before it is necessary to return the fuel to storage tanks. The unit is also equipped with the ability to return product when gravity-drain is unavailable.

DIRECTOR
JENNIFER THOMPSON
Jennifer@mdac.ms.gov
The Meat Inspection Division provides food safety assurance to consumers of meat and poultry food products.

The Meat Inspection Division provides inspection services to establishments that prepare meat and poultry food products for entry into intrastate commerce and to some establishments that engage in interstate commerce. The Division inspects all establishments engaged in the slaughtering of food animals and poultry, except for those plants operating under federal inspection. The Division also inspects the further processing of meat, meat-food products, poultry, and poultry food-products and their preparation for consumer items. These products are also inspected throughout formulation, packaging, labeling, and distribution to retail outlets. This assurance is becoming more critical as more food products are intended to be consumed with little or no further preparation at home.

MDAC has a cooperative agreement with the USDA establishing a meat and poultry inspection system that is equal to the federal inspection system. In addition, MDAC has cooperative agreements for the Talmadge-Aiken Program (TA), which permits state employees to provide inspections at federal meat plants, as well as the Compliance and Investigation Division Program (CID), which gives authority to inspect businesses that handle meat and poultry for law compliance.

ACCOMPLISHMENTS

- Inspected 25,206,236 pounds of red meat and 69,633,164 pounds of poultry.
- Inspected 41,823 animals, 21,156 rabbits, and 4,519 quail.
- Issued licenses to 31 state meat plants.
- Inspected 23 plants through the Talmadge-Aiken program.

DIRECTOR

RICHARD BENTON, D.V.M.

RichardB@mdac.ms.gov
ENSURING ACCURACY

The Weights and Measures Division regulates the use of weighing and measuring devices used in commerce to ensure consumers are treated fairly in the marketplace.

The Weights and Measures Division calibrates and tests scales and measurement equipment used in commerce and trade to ensure compliance with state laws and fairness in the marketplace for consumers.

The Division makes routine inspections and tests all types of commercial weighing devices, including scales at pawn shops, mass flow meters, roadside vendors, hopper scales, railroad scales, vehicle scales, livestock scales, platform scales, and those used to weigh precious metals and stones like gold, silver, and diamonds. Inspectors conduct package inspections to verify the labeled weight and UPC price verification of all businesses that use UPC scanning systems. The Division also investigates complaints involving weighing and measuring devices and their use.

The Division licenses livestock sale barns, livestock auctioneers, pulpwood facilities, bonded weighmaster businesses, scale repairmen, and companies that sell, install, and repair weighing or measuring devices within the state of Mississippi. The Division issues scale installation permits if a scale will have a capacity of 10,000 pounds or more. The Division also maintains the Mississippi Metrology Laboratory at Alcorn State University in Lorman, and the Moisture Meter Testing Laboratory in Stoneville.

MOISTURE METER TESTING LABORATORY

The Mississippi Moisture Meter Testing Laboratory provides testing and inspection of devices used to measure the moisture content of agricultural products offered for sale, processed, or stored using standard methods set by USDA. The Mississippi Moisture Meter Testing Laboratory also compiles grain standards used in the inspection of grain moisture meters tested in Mississippi. The laboratory is located on the campus of the Delta Research and Extension Center in Stoneville.
The Weights and Measures Division performs routine inspections to ensure compliance. As seen in the photos above, the inspectors are unloading a test cart and loading with large metal weights. The cart is then driven onto a large scale to check for inaccuracies. The Weights and Measures Division also checks UPC price codes in retail establishments. The inspector will randomly scan barcodes and compare with an inventory list provided by the location.

ACCOMPLISHMENTS

- Weights and Measures Division tested 7,728 devices/scales.
- Inspected 1,414 heavy scales, 4,553 intermediate scales, 196 livestock scales, and 59 railway track scales.
- Calibrated 12 dairy farm milk tanks.
- Conducted 102 bonded weighmaster inspections, 247 pulpwood/timber inspections, 845 package inspections, and 167 UPC inspections.
- Conducted 192 oven tests (33 corn, 41 rice, 82 wheat, 36 soybeans).

DIRECTOR
BRENT BOWMAN
Brent@mdac.ms.gov
METROLOGY LABORATORY

The Mississippi Metrology Laboratory tests, calibrates, and certifies measuring devices used in commerce for accuracy.

The Regulatory Services Bureau maintains the Mississippi Metrology Laboratory located on the campus of Alcorn State University in Lorman. The lab is accredited for the testing of mass, volume, and length by the National Institute of Standard and Technology (NIST), which certifies weighing and measuring test equipment to validate the accuracy of these standards. The certification allows the Lab to provide certification and calibration services for government, commercial, and private entities. Once certified, the equipment can be used for testing and calibrating of mass and volume standards. This certification allows the Department to test all measuring devices for accuracy used in commerce which is traceable to NIST.

ACCOMPLISHMENTS

• Calibrated 2,231 devices.

DIRECTOR
MEL IASIGI
Mel@mdac.ms.gov
The Bureau of Plant Industry protects the agricultural and horticultural interests of the state from harmful insects, diseases, and weeds.

The Bureau of Plant Industry (BPI) is a regulatory and service division of the Mississippi Department of Agriculture and Commerce. BPI serves as the Plant Protection and Quarantine Division of the agency. BPI administers 31 programs pertaining to agricultural aviation, pesticides, plant pests, honey bees, seed, animal feed, fertilizer, lime, and soil/plant amendments. Additionally, the Bureau maintains cooperative agreements with the United States Environmental Protection Agency (EPA) and USDA in administration and enforcement of state and federal laws. BPI is also designated by the federal government as the state agency responsible for the administration and enforcement of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).
PLANT PEST PROGRAM

Under the provisions of the Mississippi Plant Act, the Bureau carries out plant pest programs designed to prevent the spread of destructive insects, diseases, and other pests when plant material, machinery, and carriers are transported. These programs include inspection, certification, quarantine, and survey activities.

ACCOMPLISHMENTS

• Certified 314 nurseries.
• Certified 1,268 nursery dealers.
• Issued 520 phytosanitary certificates for plant material and seed export.
• Conducted 1,504 visual surveys statewide at nurseries and nursery dealers for Pink Hibiscus Mealybug, Chrysanthemum White Rust, Viburnum Leaf Beetle, Emerald Ash Borer, Giant African Snail, Cactus Moth, and Asian Longhorned Beetle. Survey results at all sites were negative.
• Conducted 180 visual surveys at soybean production fields in 21 counties for Maritime Garden Snail, Bud Borer, Cucurbit Beetle, Pink Hibiscus Mealybug, Yellow Witchweed, and Bengal Dayflower. Survey results at all sites were negative.
• Conducted 84 visual surveys at cotton production fields in 11 counties for Giant African Snail, Cotton Seed Bug, Pink Hibiscus Mealybug, and Bengal Dayflower. Survey results at all sites were negative.
• Conducted 92 visual surveys at rice production fields in seven counties for Giant African Snail, Apple Snails, South American Leaf Miner, Bakanae, Senegal Tea Plant, Bacterial Leaf Streak of Rice, and Bacterial Blight of Rice. Survey results at all sites were negative.
• Conducted 1,675 visual surveys statewide in nurseries, nursery dealers, and the environment for the noxious weed Cogongrass. Survey results at all sites were negative.
• Placed six traps at lumber mills and furniture manufactures in six counties for the Sirex Woodwasp. Results from all traps were negative.
• Placed 15 traps at high risk sites in five counties for Mediterranean Pine Engraver, Six-toothed Bark Beetle, European Spruce Bark Beetle, Pine Shoot Beetle, Red Haired Pine Bark Beetle, Japanese Pine Sawyer, Large Pine Beetle, and Black Fir Sawyer. Results from all traps were negative.
BUREAU OF PLANT INDUSTRY
CONTINUED

- Serviced 95 sweet potato growers.
- Monitored 3,151 traps on 28,500 acres of sweet potatoes with no positive Sweet Potato Weevil detection.
- Continued to directly serve landowners in an effort to control Cogongrass.
- Conducted a Cogongrass demonstration program for 253 private landowners treating 1,263.
- Collected assessment fees on 513,252 acres of cotton by farmers participating in statewide eradication of the Boll weevil.
- Certified and inspected 16,992 colonies of honey bees.
- Permitted 50,466 bee colonies into Mississippi.
- Placed 75 traps in 11 counties at high risk sites for Africanized Honey Bee. All traps were negative.
- Hosted the Incident Command Pest/Disease System Table Top Training for USDA, Mississippi Crop Improvement Association and Mississippi State University Extension Service.
- Hosted the Horticulture Inspection Society Southern Chapter annual convention.
- Issued federal and state phytosanitary certificates on plant materials such as nursery stock, seed, and lumber. Phytosanitary certificates facilitate trade with states and foreign countries requiring documentation certifying plant materials are free of disease and pests.

PESTICIDE PROGRAM

Under the provisions of the Mississippi Pesticide Law, the Bureau of Plant Industry carries out various activities to register and inspect pesticide products, administers special types of pesticide registrations and exemptions, license dealers of restricted-use pesticides, and conducts activities protecting the general public and the environment from possible pesticide contamination and misuse.
ACCOMP LISHMENTS

• Registered 14,397 pesticide products.
• Collected 325 samples from products available at retail and distribution outlets to check compliance with state and federal pesticide laws.
• Issued 122 stop-sale orders on pesticide products found to be deficient, misbranded, and non-registered.
• Issued two special-use registrations (Section 24c of FIFRA) on pesticide products.
• Issued four emergency exemptions (Section 18 of FIFRA) on pesticide products.
• Licensed 302 dealers to sell restricted use pesticide products.
• Issued 900 licenses/permits and 609 registered technician identification cards to persons engaged in professional services such as pest control and weed control services.
• Licensed 225 agricultural aviation pilots and 96 applicators, and registered 182 aircrafts for agricultural purposes.
• Issued 181 pest management consultants licenses.
• Issued four soil classifier licenses.
• Issued 2,649 private applicator certificates.
• Issued 383 commercial applicator certificates.
• Conducted 40 producer-establishment inspections, 406 marketplace inspections, 437 inspections of applicator records, 160 inspections of dealer records, and 23 container containment inspections.
• Conducted nine nonagricultural/for cause inspections of pesticide misuse and 98 agricultural/for cause inspections of pesticide misuse.
• Conducted 1,086 nonagricultural inspections of pesticide use and 60 agricultural inspections of pesticide use.
• Collected 105 samples under the Pesticide Enforcement Program.
• Conducted 29 worker protection inspections.
• Collected 48,903 pounds of waste pesticide products for disposal.
• Placed nine traps in two counties for Formosan Termites.
• Issued 42 Horticulturalists licenses.
• Issued 16 Tree Surgeons licenses.
MARYS and Mississippi State University developed an Auxin online educational training course addressing off-target movement, tank cleanout, and herbicide volatility. Prior to any agricultural producer purchasing or applying 2,4-D or dicamba, which is intended to be used on tolerant varieties of cotton, corn, or soybeans, the producer had to complete the Auxin online training.

Hosted EPA's Pre-SFIREG for Region 4 in Starkville. The meeting focused on the Worker Protection Standards Rule, proposed pesticide certification and training changes, issues related to pesticide drift and new technologies, state updates and renewal of EPA's Cooperative Agreement.

BPI worked with various agricultural stakeholders, including MSU-Row Crop Short Course, Mississippi Agricultural Consultants Association, Mississippi Seedsmen's Association, Mississippi Agricultural Aviation Association (MAAA), MAAA's Safety Meeting, Mississippi Pest Control Association, Mississippi Vegetation Management Association, National Pest Management Association, Mississippi Nursery and Landscape Association, Mississippi Mosquito Control & Vector Association, Mississippi Department of Health, and Mississippi Farm Bureau Specialty Meetings to provide training concerning pesticide laws and regulations.

After meeting with several agricultural stakeholders, BPI developed and launched cooperative standards implementing the Mississippi Honeybee Stewardship Program. This program was developed through a joint effort between the Mississippi Farm Bureau, Mississippi Department of Agriculture and Commerce, Mississippi Beekeepers Association, Mississippi Agricultural Aviation Association, Mississippi State University Extension Service, Mississippi Agricultural Consultants Association, Mississippi Agricultural Industry Council, and row crop farmers. The program promotes awareness, communication, and education between beekeepers and farmers.
SEED PROGRAM AND STATE SEED LABORATORY

The Seed Testing Laboratory provides regulatory and service seed testing to the seed industry and farmers of Mississippi. The seed lab inspects and collects samples of seed offered for sale to determine truth-in-labeling. Seed companies and farmers may submit samples of seed for testing to obtain quality and purity levels of seed. Regulatory and service tests protect and support seed companies and farmers by providing unbiased and reliable information in a timely manner. The Seed Testing Laboratory also tests all seed for the Mississippi Certified Seed Program.

ACCOMPLISHMENTS

• Issued 1,768 permits for the sale of seed to be planted.
• Received 14,364 seed samples and performed a total of 27,591 tests on seed.
• Collected 2,603 official regulatory seed samples and found 54 official regulatory seed samples to be in violation of the State Seed Law.
• Conducted 7,552 special tests on seed such as cool germ test, accelerated aging, and chemical tests.

FEED, FERTILIZER, LIME, AND SOIL AMENDMENTS PROGRAM

Under provisions of Mississippi laws regulating feed, fertilizer, lime, and soil amendment products, the Bureau of Plant Industry carries out activities that include registering products and facilities, collecting registration and inspection fees, inspecting and sampling products for label guarantees, and assessing penalties for substandard products.
ACCOMPLISHMENTS

- Registered 972 feed distributors.
- Collected 2,338 feed samples.
- Registered 4,549 fertilizer products from 358 fertilizer distributors.
- Collected 623 fertilizer samples.
- Registered 58 lime products from 53 distributors.

PUBLIC INFORMATION PROGRAM

The BPI public information program provided updates and training material for the following groups and/or events: Fall Flower and Garden Fest in Crystal Springs; Mississippi Agricultural Aviation Association Convention in Biloxi; Pesticide Re-certification Trainings at the Panola County Extension Office, Coastal Research and Extension Center, Forrest County Extension Office, Central MS Research and Extension Center, Delta Research and Extension Center, North MS Research and Extension Center; Annual Mississippi Pest Control Association Meeting, Mississippi Vegetation Management Association, Mississippi Rice Council, Nursery and Landscape Association, Mississippi Entomological Association, Mississippi State University – Row Crop Short Course, Mississippi State University Crop College, and Mississippi Farm Bureau Federation – Agricultural Consultants Meeting.

DIRECTOR

MICHAEL LEDLOW
MichaelL1@mdac.ms.gov
The Market Development Division promotes Mississippi agriculture and the state’s agricultural products across the state, nation, and world.

The Market Development Division is dedicated to promoting and heightening the public’s awareness of Mississippi’s agriculture commodities and the farmers and ranchers who produce them. This is accomplished through participation in trade shows, conferences and fairs, international trade, presentations to schools and civic organizations, promotion of local farmers markets, connecting with other agricultural organizations and commodity groups, and various other communication outlets. The Market Development Division consists of three main program areas: communications/outreach, promotional programs, and grants and cost-share programs.
COMMUNICATIONS / OUTREACH

The Market Development Division serves as the communications and outreach arm of the Department and is responsible for media and public relations.

The Market Development Division publishes the *Mississippi Market Bulletin*, a buy/sell newspaper for farmers to advertise their agricultural items that have been raised, grown, produced, or operated on their farms. The *Mississippi Market Bulletin* is a semi-monthly publication, published on the 1st and 15th of each month, with a circulation of nearly 36,000 in-state and out-of-state subscribers.

PROMOTIONAL PROGRAMS

The primary focus of the Market Development Division is the promotion of Mississippi agricultural products statewide, nationwide, and worldwide, in order to increase the purchase and consumption of products that are grown, raised, and made in the state. MDAC administers several programs that promote our agricultural products.

MDAC’s Agritourism Limited Liability Registration Program provides limited liability and promotion to farms engaged in agritourism activities. There are 70 registered agribusiness operations in the state.

MDAC works in conjunction with the Mississippi Department of Education (MDE) to administer the Department of Defense (DoD) Farm-to-School Program. Through this program, fruits and vegetables are purchased from Mississippi farmers and served in schools across the state. MDAC assists MDE with identifying available produce and acts as a liaison with the participating farmers. During the 2016-2017 school-year, $652,644 of Mississippi produce was ordered by local schools and 17 produce products were offered.

Farmers participating in the Farm-to-School Program can utilize the Revolving Fund Program to receive their produce payments within five days of delivery.
MDAC administers the Certified Farmers Market Program to promote farmers markets in the state with Mississippi farmers selling Mississippi produce and other agricultural products. Thirty-one markets were certified in 2016.

The Livestock and Grain Market News Program is a federal/state cooperative agreement in conjunction with USDA. Fourteen livestock auction markets are reported by eight cross-trained Mississippi Board of Animal Health personnel. Prices collected from the fourteen sales represent 85 percent of all the livestock markets throughout the state. Livestock and grain pricing is collected and disseminated throughout the internet and radio five days a week. These prices are used by lending institutions, university agricultural economists, consultants, and livestock associations.

**GRANTS AND COST-SHARE PROGRAMS**

The Market Development Division offers grant and cost-share programs to assist farmers and agribusinesses. Funding for these programs is made available through USDA rather than state funds.

Through the Specialty Crop Block Program funded by USDA, MDAC awarded $337,126.18 to organizations to enhance the state’s specialty crop industry. Ten projects were awarded to universities and producer organizations to administer research and programs in areas specifically related to consumer and grower education and workshops, school gardens, promoting local foods, and production for floriculture, sweet potatoes, tomatoes, mushrooms, and various other fruits and vegetables.

MDAC administers the Good Agricultural Practices/Good Handling Practices (GAP/GHP) Cost-Share Program to reimburse farmers for 75 percent of the cost (up to $500) incurred to obtain the GAP/GHP food safety certification. In FY2017, 32 reimbursements were granted. This program is funded by the USDA Specialty Crop Block Grant Program.

MDAC offers the Organic Cost-Share Program to Mississippi farmers obtaining Organic Certification. The program provided five organic farmers $4,251 in FY2017 to offset the cost of the certification. This program is funded through the USDA Agricultural Marketing Service.
MDAC is a member of the Southern United States Trade Association (SUSTA) with Commissioner Cindy Hyde-Smith serving as the President. SUSTA encompasses 15 southern states and the Commonwealth of Puerto Rico. Its mission is to increase exports for U.S. agriculture products and high-value foods. MDAC works jointly with other state and federal agencies to collaborate and deliver accurate information for companies interested in exporting through site visits, research, and providing potential opportunities, such as SUSTA. Market Development staff serve as liaisons for SUSTA to promote opportunities available for Mississippi agriculture and value-added products, in addition to serving as activity managers for trade shows and missions. In FY2017, MDAC staff served as activity managers for the Food Hotel China 2016, located in Shanghai, China, and FOODEX Japan 2017 located in Tokyo, Japan. These trade shows give small companies the opportunity to have a larger presence by being branded under the SUSTA name and pavilion. Through MDAC’s membership in SUSTA, Mississippi companies can take advantage of cost-share programs, allowing them to be reimbursed for eligible expenses incurred to reach new international markets.

MDAC created the Growing Lunch School Garden Grant through the USDA Specialty Crop Block Program for schools interested in building a school garden. A total of 23 schools were awarded a school garden grant. By the end of the grant period, more than 5,000 students were impacted as a result.

MDAC also operates the Mississippi Farmers Market to give Mississippi farmers a location to sell their locally-grown fruits, vegetables, meats, dairy products, and other agricultural products directly to the public.

**ACCOMPLISHMENTS**

- Received $337,126.18 in Specialty Crop Block Grant funds from USDA in FY2017 to promote the specialty crop industry of the state. Since its inception in 2006, MDAC has received $2,995,171.85 from USDA in Specialty Crop Block Grant funds.
- Expanded the Farm-to-School Program, working with the Mississippi Department of Education. During the 2016-2017 school year, schools ordered 16,528 cases of Mississippi products, totaling $652,644.
- Provided 144 Certificates of Free Sales to 14 companies exporting Mississippi agricultural products.
Students from the Oxford School District in Oxford, Mississippi, received a Growing Lunch School Garden Grant from the Mississippi Department of Agriculture and Commerce to expand one of their school’s gardens. A total of 23 schools have utilized the Growing Lunch School Garden Grant funds this year.
The Mississippi Farmers Market was created by the Mississippi Legislature to provide a facility for the efficient handling of farm products in the interest of the farmer, consumer, general public, and the State of Mississippi. The 18,000 square foot facility serves as a central location for farmers, specialty food makers, and local artisans to sell their agricultural goods and wares. The Market provides farmers with additional marketing opportunities, while increasing consumers’ access to fruits, vegetables, and other farm-raised products.

The Mississippi Farmers Market participates in two USDA Farmers Market Nutrition Programs: The WIC Farmers Market Nutrition Program and the Senior Farmers Market Nutrition Program. These programs provide vouchers to eligible WIC participants and senior citizens to shop at the Market. The Market also participates in the AARP Fresh Savings Program which provides SNAP recipients a dollar-for-dollar match, up to $20, in tokens to purchase fruits and vegetables when using their EBT card.

The Market also rents the facility for private events. A restaurant, The Farmer’s Table, is located inside the Market. It serves breakfast and lunch five days per week and utilizes products from the farmers on their menu.

ACCOMPLISHMENTS
- Named one of the Best Farmers Markets in the South by Southern Living.
- Provided a venue for 80 total vendors, an average of 47 vendors per week.
- Attracted an average of 1,700 shoppers each week.
- Successfully implemented the AARP’s Fresh Savings Program, which increased farmers’ sales.
The Information Management Division provides information technology services to MDAC staff.

The Information Management Division (IMD) is primarily responsible for providing information technology and services to all employees of the Mississippi Department of Agriculture and Commerce (MDAC). Also, IMD provides technical and network support, application development and systems support, and strategic planning services for both the Mississippi Board of Animal Health and the Mississippi State Fair Commission.

IMD plays a critical role in (a) aligning information technology with the agency’s business goals, (b) providing the infrastructure resources to support the agency’s communication and decision making, and (c) exploring emerging technologies to promote agriculture and commerce in the state.

**ACCOMPLISHMENTS**

Designed and implemented a web based Dicamba-2, 4-D herbicide technology training registration database system. This database management system, developed in conjunction with the Mississippi State University Extension Service, provides over 1,100 producers an online educational training and certification upon completion. The training helps growers to purchase auxin-containing herbicides and to safely maximize the benefits of auxin technologies.

Implemented security access control and video camera surveillance system for the main administration office building in Jackson. This system, integrated with State Capital Police, provides 24/7 monitoring and employees access control of the building to provide safe and secure office environment for agency employees.

**DIRECTOR**

**UMESH SANJANWALA**

Umesh@mdac.ms.gov
The Mississippi Agriculture and Livestock Theft Bureau assists in the investigation of all farm and agriculture-related crimes.

The Mississippi Agriculture and Livestock Theft Bureau (MALTB) enforces all state laws pertaining to the theft of cattle, horses, swine, poultry, fish, farm equipment, chemicals, timber, and all other farm or agriculture-related crimes. The Bureau consists of nine investigators, one for each Mississippi Highway Patrol District. The Bureau is also responsible for the investigation and prosecution of all persons who violate any of the laws administered by the Mississippi Department of Agriculture and Commerce.

In addition to its law enforcement function, MALTB maintains registration of all livestock brands. Livestock in Mississippi do not have to be branded; however, if they are branded, the brand must be registered. The brands are recorded for a five-year period at a cost of five dollars. Registered brands are published in book form and distributed to law enforcement throughout the state. The most current book was printed in December 2012 and has over 1,100 brands registered.

ACCOMPLISHMENTS

• Investigated 141 cases with a reported value of $256,079, clearing 21 cases.
• Recovered property valued at $71,821.

Mississippi Agriculture and Livestock Theft Bureau along with Madison County Sheriff’s Office recover approximately one quarter million dollars of stolen equipment.
Percentage distribution of dollar value of reported crimes FY2017.
The Mississippi Agriculture and Forestry Museum tells the story of Mississippi’s agricultural history through indoor and outdoor exhibits and events.

The mission of the Mississippi Agriculture and Forestry Museum is to create an environment that communicates the value of past and present Mississippi agricultural lifestyles, relationships, and practices and their relevance to the future of all people. The Museum consists of multiple exhibits including Small Town, Mississippi, a train exhibit featuring several gauges of trains, and a nature trail. The Mississippi Agriculture and Forestry Museum is home to the Bisland Cotton Gin, America’s oldest working cotton gin, and the National Agriculture Aviation Museum.
• For more than 20 years, the Mississippi Agriculture and Forestry Museum has been home to the Celtic Fest. More than 2,000 attendees enjoyed the event in September 2016.

• Over 6,800 children and adults attended the October Pumpkin Adventure, which included a hay ride tour of gardens and Small Town, Mississippi, a walk around the Museum, and a pumpkin to take home.

• Harvest Festival was visited by nearly 6,000 people. This educational event consisted of demonstrations at the saw mill, cane mill, print shop, blacksmith shop, and grist mill. The Bisland Cotton Gin, America’s oldest working cotton gin, ginned four bales of cotton for visitors. The event also featured hit-and-miss engines, bluegrass music, antique tractors, and live interpreters demonstrating butter churning at the Fortenberry-Parkman Farmstead. Harvest Fest featured two weeks of pre-and-post-industrial revolution agriculture.

• The Museum hosted more than 600 guests for its Country Christmas event. This complementary event was sponsored by the Mississippi Egg Marketing Board and the Mississippi Beef Council. Guests were treated to wagon rides, Small Town in Lights, a skit, live music, and breakfast for dinner.

• The Mississippi Egg Marketing Board’s Annual Easter Egg Hunt and Spring Planting Day at the Museum attracted more than 1,500 visitors who enjoyed complimentary sausage and biscuits, egg dyeing, games, and an egg hunt.

• Spring Farm Days offered the opportunity for more than 900 visitors to see tractor demonstrations, blacksmith demonstrations, and tour the Fortenberry-Parkman Farmstead.

• AgVentures, held in partnership with Mississippi State University Extension Service, Mississippi Farm Bureau, Mississippi Cattlemen’s Association, Mississippi Cattlemen’s Association, Mississippi Department of Wildlife Fisheries and Parks, Mississippi Soil and Water Commission, and USDA’s Natural Resources Conservation Service, was presented to 700 fourth grade students and teachers who learned the important role agriculture plays in our society. Interactive activities and displays included a visit to the barnyard, a tour of the nature trail, milking Cloverbelle the Cow at the 4-H Museum, and presentations about soybeans, composting, and the cotton gin.

• The Museum hosted the first annual JackTown Throwdown BBQ competition, which hosted more than 30 BBQ teams from 16 states and 300 attendees.
• The Mississippi Agriculture and Forestry Museum introduced a story time program in which Museum personnel reads an agriculture related book with a puppet, have a physical activity or music session, and then complete an agriculture related craft. The Museum intends to expand this monthly program into a weekly and mobile event.
• The Mississippi Agriculture and Forestry Museum is currently working on a variety of programming opportunities with our partner volunteer groups, including the Central Mississippi Model Railroad Association and the Jackson Master Gardeners.

The Mississippi Agriculture and Forestry Museum was able to complete renovations to its working sawmill, including an observation deck for visitors to watch lumber being milled, with the support of the Mississippi Forestry Association.
NEW PROJECTS

• The Mississippi Agriculture and Forestry Museum has completed phase 1 (of 2) of construction design and facilities layout for replacing the museum’s restoration shop and large equipment exhibit.

• The Mississippi Agriculture and Forestry Museum replaced their Security Camera System with an updated, modern security system, and converted to Capital Police jurisdiction. The Museum’s cameras are now monitored by Capital Police system in addition to Museum personnel.

• The Museum finished 75 percent of the reconstruction and renovation work on the Fortenberry-Parkman Farmstead. This project is jointly funded through the Community Heritage Preservation Grant, administered by the Mississippi Department of Archives and History, and the Mississippi Agriculture and Forestry Museum Foundation. Traditional materials and techniques are being used to preserve the historical accuracy of the buildings in the farmstead in accordance with MDAH standards. The collection of buildings is significant because it is a fully intact Mississippi farm representative of the typical farmer from 1860 to 1960. In total, eight buildings on the Farmstead will return to an accessible state for the public, increasing the educational value of the exhibit, and restoring a site that has great potential for heritage tourism.

• In cooperation with the Mississippi Forestry Association, the Museum has renovated and rebuilt large sections of the sawmill. These repairs allow the Museum to mill its own lumber to use for the repairs and construction of its own buildings, and to highlight the benefits of the forestry industry to Mississippi.

• The Mississippi Agriculture and Forestry Museum is currently redesigning the National Agriculture Aviation Museum exhibit, the Introduction to Mississippi exhibit, and the Heritage Center lobby into a combined welcome lobby and rental venue.
The Mississippi Agriculture and Forestry Museum was chosen as a host for the Smithsonian travelling exhibit Water Ways. This exhibit highlights the importance of transportation in the development of the United States and will be the first Smithsonian exhibit at the Museum in its 39-year history.

The Museum received more than $120,000 of renovation money to restore the Fortenberry-Parkman Farmstead, of which 80 percent was granted by the Mississippi Department of Archives and History and 20 percent was granted by the Mississippi Agriculture and Forestry Museum Foundation.

The Jackson Convention and Visitors Bureau grant for out-of-market advertising expenses for 2016-2017 is estimated to be more than $14,000.

The Museum received more than $3,800 from the Mississippi Forestry Association for the renovations on the sawmill.

The Mississippi Agriculture and Forestry Museum received more than $9,000 from the Mississippi Agriculture and Forestry Museum Foundation for the conceptual design and renovation plans for the National Agriculture Aviation Museum exhibit.

The Museum worked in conjunction with Mississippi State University Extension and Keep Mississippi Beautiful to install more than $1,500 of native plants.